

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2/12/81	
Company Lively Exploration Co.				Connection	
Pool Basin Dakota				Formation Dakota	
Completion Date 2/3/81		Total Depth 7575'		Plug Back TD 7527'	
				Elevation 6435'GL	
Farm or Lease Name Lively				Well No. 3-E	
Csg. Size 4-1/2"	Wt. 10.50 & 11.60	d 4.052	Set At 7569'	Perforations: From 7384' To 7424'	
Tbg. Size 2-3/8"	Wt. 4.70	d 1.995	Set At 7409'	Perforations: From To	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At None	
Producing Thru Tubing		Reservoir Temp. °F 156 @ 7575		Mean Annual Temp. °F 60	
				Baro. Press. - P ₀ 12.0	
State New Mexico					
L 7409	H 7409	Gg	% CO ₂ --	% N ₂ --	% H ₂ S --
Prover --		Meter Run --		Taps --	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
1.	3/4" THC						2100		1900	
2.							220	60	920	
3.										
4.										
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	12.3650		232	1.000	1.000	1.000	2869
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2.					Specific Gravity Separator Gas	
3.					Specific Gravity Flowing Fluid	X X X X X
4.					Critical Pressure	P.S.I.A.
5.					Critical Temperature	R

P _c 1912 P _c ² 3,655,744		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3117$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2556$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1		932	868,624	2,787,120	
2					
3					
4					
5					

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3516$

Absolute Open Flow	Mcf @ 15.025	Angle of Slope θ	Slope, n 0.75
--------------------	--------------	-------------------------	---------------

Remarks:

Approved By Commission:	Conducted By: Steve Martin Dale	Calculated By: Dewayne Blancett	Checked By:
-------------------------	------------------------------------	------------------------------------	-------------